CONTROL NUMBER	FILING DATE	PATENT UNDER REEXAMINATION	ATTORNEY DOCKET NO.
90/005,471	08/13/99	5598526	50246-069

WM41/0831

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EXAMINER
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ART UNIT	PAPER NUMBER
2671	

DATE MAILED:
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~~REEXAMINATION COMMUNICATION~~

A SHORTENED STATUTORY PERIOD FOR RESPONSE TO THIS ACTION IS SET TO EXPIRE _One_ MONTH(S) FROM THE DATE OF THIS LETTER. EXTENSIONS OF TIME ARE GOVERNED BY 37 CFR 1.550(c).

cc: Requester

PTOL-473 (2-90)

	Application No.	Applicant(s)
Office Action Summary	09/374,041	NALLY ET AL.
	Examiner	Art Unit
	Ulka J. Chauhan	2671

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>1</u> MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☐ Responsive to communication(s) filed on _____ .

2a) ☐ This action is **FINAL**.   2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *1-48* is/are pending in the application.

     4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☒ Claim(s) *13-24 and 34-36* is/are allowed.

6) ☒ Claim(s) *1-12,25-33,37-41,43 and 45-47* is/are rejected.

7) ☒ Claim(s) *42,44 and 48* is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) ☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

     If approved, corrected drawings are required in reply to this Office action.

12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

     a)☐ All b)☐ Some * c)☐ None of:

         1.☐ Certified copies of the priority documents have been received.

         2.☐ Certified copies of the priority documents have been received in Application No. _____ .

         3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

     * See the attached detailed Office action for a list of the certified copies not received.

14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

     a) ☐ The translation of the foreign language provisional application has been received.

15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .

4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: .

DETAILED ACTION

Response to Decision to Merge Reexamination and Reissue Proceedings

1.   In response to the Decision, the finality of the rejection of the last Office action in the

Reexamination Application 90/005,471 is withdrawn.

2.   The declaration filed in the Reexamination Application 90/005,471, on 5/14/01 under 37

CFR 1.131 declaring the date of invention of the United States Patent No. 5,598,525 to be before

April 29,1994, is sufficient to overcome the Bindlish reference.

3.   The merged examination is being conducted on the basis of the rules relating to the

reissue application.

Reissue Applications

4.   While there is concurrent litigation related to this reissue application, action in this

reissue application will NOT be stayed, because a stay of that litigation is in effect for the

purpose of awaiting the outcome of these reissue proceedings. Due to the related litigation status

of this reissue application, EXTENSIONS OF TIME UNDER THE PROVISIONS OF 37 CFR

1.136(a) WILL NOT BE PERMITTED.

5.   The original patent, or an affidavit or declaration as to loss or inaccessibility of the

original patent, must be received before this reissue application can be allowed. See 37 CFR

1.178.

6.   Changes to the patent by a Certificate of Correction dated prior to the filing of this reissue

application appear in the reissue application as bracketed changes. A clean copy of the

specification with the Certificate of Corrections changes incorporated therein is requested.

Claim Rejections - 35 USC § 112

7.   The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

8.   Claims 1-12 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claim 1 recites "an interface for receiving words of pixel data, each said word associated with an address buffer". There is no clear written description in the specification of "an address buffer". Claims 2-12 are dependent on claim 1 and therefore are similarly rejected.

9.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

10.   Claims 25-33 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

11.   Claim 25 recites the limitation "said playback data" in col. 17 line 42. There is insufficient antecedent basis for this limitation in the claim. Claims 26-33 are dependent on claim 25 and therefore similarly lack antecedent basis for this limitation.

Claim Rejections - 35 USC § 102

12.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

13.   Claim 37-39 and 41 are rejected under 35 U.S.C. 102(e) as being anticipated by

United States Patent No. 5,406,306 to Siann et al.

14.   As per claim 37, Siann teaches an apparatus for displaying graphics and video in a window on a video monitor in which all the elements of the system 50 other than the display memory and the monitor are integrated on a single chip ("A single integrated display controller") at col. 9 lines 9-13. Siann teaches that the system 50 includes a display memory 52 having a first portion 54 storing graphics information and a second portion 56 storing video information ("multi-format frame buffer ... simultaneously storing graphics and video data") at col. 4 lines 55-68. Siann further teaches that graphics data is retrieved from the first portion 54 and processed by stages including a delay stage 84 and a pixel formatter 86 stage before being selected by a multiplexer 74 for eventual display on the monitor ("a first pipeline for processing words of graphics data") at col. 8 lines 9-52. Siann further teaches that video data is retrieved from the second portion 56 and processed by stages including FIFO 58, decompression 66, color space converter 70, and upscaler 72 before being selected by a multiplexer 74 for eventual display on the monitor ("a second pipeline, separate from the first pipeline, for processing words of video data") at col. 7 lines 19-55. As Siann teaches retrieving graphics data from the first portion and video data from the second portion, Siann teaches "circuitry for selectively retrieving" at col. 4 lines 59-col. 5 line 13.

15.   As per claims 38 and 39, Siann teaches that control signals from video window logic 82

are color key data provided from the portion 54 of the display memory 52 to indicate that the

pixel positions in the window 14 on the video monitor are video and not graphics pixels at col. 7

line 64-col. 8 lines 8. And Siann teaches that the multiplexer 74 is controlled to pass either video

or graphics data based on the indication from the video window logic that a pixel is within a

window 14 at col. 8 lines 45-52.

16.   As per claim 41, Siann teaches that control signals from video window logic 82 are color

key data provided from the portion 54 of the display memory 52 to indicate that the pixel

positions in the window 14 on the video monitor are video and not graphics pixels at col. 7 line

64-col. 8 lines 8. And Siann teaches that the multiplexer 74 is controlled to pass either video or

graphics data based on the indication from the video window logic that a pixel is within a

window 14 at col. 8 lines 45-52. Therefore, Siann teaches that either pixel data or color key data

is output from the first portion 54 as graphics information.

Claim Rejections - 35 USC § 103

17.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

18.   This application currently names joint inventors. In considering patentability of the

claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various

claims was commonly owned at the time any inventions covered therein were made absent any

evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out

the inventor and invention dates of each claim that was not commonly owned at the time a later

invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c)

and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

19.   **Claims 1-6 and 12, are rejected under 35 U.S.C. 103(a) as being unpatentable over**

United States Patent No. 5,406,306 to Siann et al, United States Patent No. 5,752,010 to

Herbert, and United States Patent No. 5,381,347 to Gery.

20.   As per claims 1-4, Siann teaches an apparatus for displaying graphics and video in a

window on a video monitor in which all the elements of the system 50 other than the display

memory and the monitor are integrated on a single chip ("A single integrated display controller")

at col. 9 lines 9-13. Siann further teaches that the display memory 52 has a first portion 54

storing graphics information and a second portion 56 storing video information at col. 4 lines 55-

68. Since Siann teaches that graphics and video data are stored in separate portions of the

display memory, Siann teaches associating graphics data with addresses of the first portion 54

and video data with addresses of the second portion 56. And further, as Siann teaches retrieving

graphics data from the first portion and video data from the second portion, Siann teaches

"circuitry for selectively retrieving" at col. 4 lines 59-col. 5 line 13. Siann further teaches that

graphics data is retrieved from the first portion 54 and processed by stages including a delay

stage 84 and a pixel formatter 86 stage before being selected by a multiplexer 74 for eventual

display on the monitor ("a first pipeline for processing words of graphics data") at col. 8 lines 9-

52 and that video data is retrieved from the second portion 56 and processed by stages including

FIFO 58, decompression 66, color space converter 70, and upscaler 72 before being selected by a

multiplexer 74 for eventual display on the monitor ("a second pipeline, separate from the first

pipeline, for processing words of video data") at col. 7 lines 19-55. And finally, Siann teaches

that when a color key is detected by the color key detector 88 and the video window logic 82

indicates that a pixel is within a video window 14, the multiplexer 74 is controlled to pass video

data instead of graphics data ("video data is ready for display ...display position of a window")

at col. 8 lines 37-52.

21.   As per claim 1, Siann does not expressly teach an interface receiving pixel data that are

associated with an address buffer. Herbert teaches a graphics controller for displaying both

graphics and video data stored in a display memory in which the graphics controller includes a

data controller for receiving both graphics and video data and forwarding the received data to the

display memory in response to the address of the data being within address ranges defined by

registers 44 and 46 at Fig. 3 and col. 3 lines 32-65. It would have been obvious to one of

ordinary skill in the art at the time the invention was made to have combined the teachings of

Siann and Herbert such that the data controller taught by Herbert is implemented in Siann's

invention whereby received graphics and video data are easily and efficiently directed to the

appropriate portions of the display memory in response to the address of the received graphics

and video data falling within specific address ranges. As per claim 1, Siann additionally does not

expressly teach partitioning the display memory into on-screen and off-screen areas. Gery

teaches a computer system 201 and a method for displaying images on a display using an

offscreen memory in which the memory 214 contained in the graphics adapter 204 includes an

onscreen memory 215 and an offscreen memory 217 at col. 4 lines 15-24 and Fig. 2. Gery

further teaches that graphics data are created in the offscreen memory and transferred to the

onscreen memory 215 for display, and that while data are being displayed from the onscreen

memory new graphics data are created in the offscreen memory at col. 5 lines 2-32. It would

have been obvious to one of ordinary skill in the art at the time the invention was made to have

combined the teachings of Siann, Herbert, and Gery such that the display memory having

portions for storing graphics and video data as taught by Siann is implemented as including

onscreen portion and offscreen portion as taught by Gery whereby new graphics and video data

are written to the appropriate locations in the offscreen portions based on address comparison

with programmed ranges as taught by Herbert while the graphics and video data in the onscreen

portions are being displayed. One would have been motivated to make this modification for the

purpose of easily and efficiently directing graphics and video data to the appropriate locations

within the two portions of the display memory and for the purpose of providing new data for

display more quickly.

22.   As per claim 5, Siann teaches that control signals from video window logic 82 are color

key data provided from the portion 54 of the display memory 52 to indicate that the pixel

positions in the window 14 on the video monitor are video and not graphics pixels at col. 7 line

64-col. 8 lines 8. And Siann teaches that the multiplexer 74 is controlled to pass either video or

graphics data based on the indication from the video window logic that a pixel is within a

window 14 at col. 8 lines 45-52. Therefore, Siann teaches that either pixel data or color key data

is output from the first portion 54 as graphics information.

23.   As per claim 6, as Siann teaches storing graphics and video data in the display memory, a

port for receiving video data and circuitry for generating an address at which the video data is to

be stored would be inherent features of Siann's invention. As per claim 6, Siann does not

expressly teach real-time video data. Herbert teaches that the video data is time sensitive and

includes video data from a TV signal or CD ROM at col. 3 lines 16-21. It would have been

obvious to one of ordinary skill in the art at the time the invention was made to have combined

the teachings of Siann and Herbert and provided a video port for receiving real-time video data

as taught by Herbert whereby real-time video data is stored in the display memory of Siann's

invention and processed for the purpose of enhancing Siann's invention by displaying real-time

video data from a TV signal or a CD ROM.

24.   As per claim 12, Herbert teaches that the data controller 36 has an access port 39 for

receiving graphics and video data at col. 3 lines 24-54.

25.   Claims 40, 43, and 45-47 are rejected under 35 U.S.C. 103(a) as being unpatentable

over United States Patent No. 5,406,306 to Siann et al and United States Patent No.

5,381,347 to Gery.

26.   As per claim 40, Siann teaches that the display memory 52 has a first portion 54 storing

graphics information and a second portion 56 storing video information ("frame buffer ...

simultaneously storing graphics and video data") at col. 4 lines 55-68. Siann does not expressly

teach partitioning the display memory into on-screen and off-screen areas. Gery teaches a

computer system 201 and a method for displaying images on a display using an offscreen

memory in which the memory 214 contained in the graphics adapter 204 includes an onscreen

memory 215 and an offscreen memory 217 at col. 4 lines 15-24 and Fig. 2. Gery further teaches

that graphics data are created in the offscreen memory and transferred to the onscreen memory

215 for display, and that while data are being displayed from the onscreen memory new graphics

data are created in the offscreen memory at col. 5 lines 2-32. It would have been obvious to one

of ordinary skill in the art at the time the invention was made to have combined the teachings of

Siann and Gery such that the display memory having portions for storing graphics and video data

as taught by Siann is implemented as including onscreen portion and offscreen portion as taught

by Gery whereby new graphics and video data are written to the offscreen portions while the

graphics and video data in the onscreen portions is being displayed. One would have been

motivated to make this modification for the purpose of providing updated data for display more

quickly.

27.   As per claim 43, Siann teaches a system 50 including a display memory 52 having a first

portion 54 storing graphics information and a second portion 56 storing video information

("multi-format frame buffer ... simultaneously storing graphics and video pixel data") at col. 4

lines 55-68. Siann further teaches that graphics data is retrieved from the first portion 54 and

processed by stages including a delay stage 84 and a pixel formatter 86 stage before being

selected by a multiplexer 74 ("an output selector") for eventual display on the monitor ("a first

pipeline for processing words of graphics data") at col. 8 lines 9-52. Siann further teaches that

video data is retrieved from the second portion 56 and processed by stages including FIFO 58,

decompression 66, color space converter 70, and upscaler 72 before being selected by a

multiplexer 74 for eventual display on the monitor ("a second pipeline, separate from the first

pipeline, for processing words of video data") at col. 7 lines 19-55. As Siann teaches retrieving

data from the first portion and video data from the second portion, Siann teaches "circuitry for

selectively retrieving" at col. 4 lines 59-col. 5 line 13. As per claim 43, Siann does not expressly

teach partitioning the display memory into on-screen and off-screen areas. Gery teaches a

computer system 201 and a method for displaying images on a display using an offscreen

memory in which the memory 214 contained in the graphics adapter 204 includes an onscreen

memory 215 and an offscreen memory 217 at col. 4 lines 15-24 and Fig. 2. Gery further teaches

that graphics data are created in the offscreen memory and transferred to the onscreen memory

215 for display, and that while data are being displayed from the onscreen memory new graphics

data are created in the offscreen memory at col. 5 lines 2-32. It would have been obvious to one

of ordinary skill in the art at the time the invention was made to have combined the teachings of

Siann and Gery such that the display memory having portions for storing graphics and video data

as taught by Siann is implemented as including onscreen portion and offscreen portion as taught

by Gery whereby new graphics and video data are written to the offscreen portions while the

graphics and video data in the onscreen portions is being displayed. One would have been

motivated to make this modification for the purpose of providing updated data for display more

quickly.

28.   As per claims 45-47, Siann teaches that control signals from video window logic 82 are

color key data provided from the portion 54 of the display memory 52 to indicate that the pixel

positions in the window 14 on the video monitor are video and not graphics pixels at col. 7 line

64-col. 8 lines 8. Siann further teaches that when a color key is detected by the color key

detector 88 and the video window logic 82 indicates that a pixel is within a video window 14, the

multiplexer 74 is controlled to pass video data instead of graphics data at col. 8 lines 37-52.

Allowable Subject Matter

29.   Claim 25 would be allowable if rewritten or amended to overcome the rejection(s) under

35 U.S.C. 112, second paragraph, set forth in this Office action.

30.   Claims 26-33 would be allowable if rewritten to overcome the rejection(s) under 35

U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations

of the base claim and any intervening claims.

31.   Claims 13-24 and 34-36 are allowed.

32.   Claims 42, 44 and 48 are objected to as being dependent upon a rejected base claim, but

would be allowable if rewritten in independent form including all of the limitations of the base

claim and any intervening claims.

33.   The following is a statement of reasons for the indication of allowable subject matter: the

cited prior art does not disclose or render obvious the combination of elements recited in the

claims. Specifically, the cited prior art fails to disclose or render obvious the following

limitations: a port receiving both graphics and video data associated with addresses indicating

that the data are to be processed as graphics or video data as well as a second port receiving real-

time video data as per claim 13; an input port receiving both graphics and video data associated

with addresses indicating that the data are to be processed as graphics or video data, writing

playback data into a selected on-screen or off-screen area of the multi-format frame buffer, and

memory control circuitry controlling the transfer of data between the multi-format frame buffer

and the two backend pipelines as per claim 25; a video pipeline comprising a fist and a second

FIFO disposed in parallel to each other receiving selected data selected from on-screen and off-

screen spaces of a frame buffer as per independent claim 34; and retrieving video data from a

frame buffer simultaneously storing graphics and video data and providing the video data to the

video pipeline *only* when a video display window is being generated as per claims 42 and 44.

Response to Arguments

34.   Applicant's arguments with respect to the claims presented in the Reexamination

Application 90/005,471 have been considered but are moot in view of the new grounds of

rejection presented in this office action. The new grounds of rejection are in response to the

declaration overcoming the Bindlish reference.

Conclusion

35.   The prior art made of record and not relied upon is considered pertinent to applicant's

disclosure. United States Patent No. 5,557,302 to Levinthal et al. discloses displaying both

computer display data and video data on a computer display.

36.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Ulka J. Chauhan whose telephone number is (703) 305-9651.

The examiner can normally be reached on Mon. through Fri., 9:30 a.m. to 4:00 p.m.

37.   If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Mark Zimmerman can be reached on (703) 305-9798. The fax phone number for the

organization where this application or proceeding is assigned (703) 872-9314.

38.   Any inquiry of a general nature or relating to the status of this application or proceeding

should be directed to the receptionist whose telephone number is (703) 305-4700.

Ulka J. Chauhan
Primary Examiner
Art Unit 2671

ujc
August 23, 2001